

## Contents

Preface	vii
<b>Definitions</b>	
RIDDLER, G. What is a mineral resource?	1
ARMITAGE, M. G. & POTTS, M. F. A. Some comments on the reporting of resources and reserves	11
JAKUBIAK, Z. & SMAKOWSKI, T. Classification of mineral reserves in the former Comecon countries	17
<b>Data</b>	
GRIBBLE, P. D. Fault interpretation from coal exploration borehole data using SURPAC2 software	29
HATTON, W. INTMOV; a program for the interactive analysis of spatial data	37
NATHANAIL, P. Reserve assessment of a stratified deposit with special reference to open-pit coal mining in Great Britain	45
<b>Deposit variability</b>	
NOTHOLT, A. J. G. Phosphate rock: factors in economic and technical evaluation	53
BELL, T. M. & WHATELEY, M. K. G. Evaluation of grade estimation techniques	67
DOWD, P. A. Optimal open pit design: sensitivity to estimated block values	87
SCOBLE, M. & MOSS, A. Dilution in underground metal mining: implications for grade control and production management	95
SIDES, E. J. Quantifying differences between computer models of orebody shapes	109
<b>Finance</b>	
GORMAN, P. A review and evaluation of the costs of exploration, acquisition and development of copper and gold projects in Chile	123
O'LEARY, J. Mining project finance and the assessment of ore reserves	129
<b>Case histories</b>	
DOWD, P. A. The optimal design of quarries	141
AL-HASSAN, S. & ANNELS, A. E. Geostatistical estimation of manganese oxide resources at the Nsuta Mine, Ghana	157
ANNELS, A. E., INGRAM, S. & MALMSTROM, L. Structural reconstruction and mineral resource evaluation at Zinkgruvan Mine, Sweden	171
ARTHUR, J. & ANNELS, A. E. The application of geostatistical techniques to <i>in situ</i> resource estimation in the sand and gravel industry	191
CAMERON, R. I. & MIDDLEMIS, H. Computer modelling of dewatering a major open pit mine: case study from Nevada, USA	207
CRUMP, L. A. & DONNELLY, R. Opencast coal mining; a unique opportunity for Clee Hill Quarry	219
BARRY, J., GUARD, J. & WALTON, G. Database management at the Lisheen deposit, Co. Tipperary, Ireland	233
MITCHELL, C. J. Laboratory evaluation of kaolin: a case study from Zambia	241
O'LEARY, J. Cia Minerá Los Pelambres: a project history	249